

IN THE CLAIMS

Please amend the claims follows.

1-4. (Cancelled)

5. (New) Flooring system comprising board shaped floor elements having a mainly square or rectangular shape and each being provided with four side edges, a lower surface and a decorative upper surface, wherein the flooring system further comprises separate joining profiles for connecting said board shaped floor elements to each other,

wherein each of the floor elements are provided with grooves which are formed in the lower surface thereof, each groove being positioned in parallel to one of the side edges of the floor elements,

the parts of each of the floor elements which are disposed between the side edges and the respective closest grooves are thinned down by means of a recess in the corresponding parts of the lower surface of the floor element, and

each joining profile is provided with lips arranged in pairs and joined by a middle section, each lip being so arranged and constructed as to be received by one of the grooves of a floor element,

wherein each joining profile has the shape of a T with three cheeks, the cheeks of each joining profile each being provided with said lips arranged in pairs and jointed by a middle section.

6. (New) Flooring system comprising board shaped floor elements having a mainly square or rectangular shape and each being provided with four side edges, a lower surface and a

decorative upper surface, wherein the flooring system further comprises separate joining profiles for connecting said board shaped floor elements to each other,

wherein each of the floor elements are provided with grooves which are formed in the lower surface thereof, each groove being positioned in parallel to one of the side edges of the floor element,

the parts of each of the floor elements which are disposed between the side edges and the respective closest grooves are thinned down by means of a recess in the corresponding parts of the lower surface of the floor element, and

each joining profile is provided with lips arranged in pairs and joined by a middle section, each lip being so arranged and constructed as to be received by one of the grooves of a floor element,

wherein each of the joining profiles has the shape of a + with four cheeks, and three of the cheeks of each of these joining profiles are provided with said lips arranged in pairs and joined by a middle section, whereas the fourth cheek thereof is provided with only one lip and a middle section.

7. (New) Flooring system according to claim 5, wherein each groove is formed at a distance from the closest side edge which is less than  $1/4$  of the width of the respective floor element.

8. (New) Flooring system according to claim 5, wherein the side edges are provided with a V-shaped groove or matching profiles, respectively.

9. (New) Flooring system according to claim 5, wherein the side edges are provided with notch-like grooves, and the system further comprises matching second joining profiles.

10. (New) Flooring system according to claim 9, wherein said second joining profiles are parts of said joining profiles.

11. (New) Flooring system according to claim 9, wherein said second joining profiles are separate parts.